

AMENDMENT TO THE CLAIMS

The following is a complete listing of the pending claims.

1. (Previously presented) A method for reducing the incorporation of norleucine into a heterologous protein expressed by a microorganism comprising:
modifying a microorganism to co-express a heterologous protein and a non-standard amino acid degrading protein, wherein the expression of the non-standard amino acid degrading protein is increased relative to its expression in the microorganism before said modifying step;
and wherein the non-standard amino acid degrading protein is a glutamate dehydrogenase, leucine dehydrogenase, valine dehydrogenase, phenylalanine dehydrogenase, or glutamate/leucine/phenylalanine/valine dehydrogenase.
2. (Previously presented) The method of claim 1 wherein the non-standard amino acid degrading protein is a glutamate dehydrogenase.
3. (Currently amended) The method of claim 12 wherein the non-standard amino acid degrading protein is a wild-type *Escherichia coli* glutamate dehydrogenase or a *Escherichia coli* glutamate dehydrogenase having with a leucine at the amino acid position that corresponds with amino acid position 92 of said wild-type glutamate dehydrogenase, wherein the amino acid at position 92 of said wild-type glutamate dehydrogenase is a lysine.
4. (Previously presented) The method of claim 3 wherein the non-standard amino acid degrading protein comprises SEQ ID NO:2 or 4.
5. (Previously presented) The method of claim 4 wherein the non-standard amino acid degrading protein is encoded by a DNA molecule comprising SEQ ID NO:1 or 3.
- 6-7. (Cancelled)
8. (Original) The method of claim 1 wherein the microorganism is *Escherichia coli*.

9. (Previously presented) The method of claim 1 wherein the expressed heterologous protein is a somatotropin.
10. (Previously presented) The method of claim 9 wherein the somatotropin is selected from the group consisting of human, equine, bovine, ovine, porcine, canine, and feline somatotropin.
11. (Original) The method of claim 9 wherein the somatotropin is bovine somatotropin.
12. (Previously presented) The method of claim 2 wherein the non-standard amino acid degrading protein is an *Escherichia coli* glutamate dehydrogenase.
13. (Cancelled)
14. (Original) The method of claim 1 wherein the heterologous protein and the non-standard amino acid degrading protein are expressed from a single expression vector.
15. (Original) The method of claim 1 wherein the heterologous protein and the non-standard amino acid degrading protein are expressed from at least two distinct expression vectors.
- 16-41. (Cancelled)
42. (Previously presented) The method of claim 1 wherein the heterologous protein and/or the non-standard amino acid degrading protein is expressed from a location in the microorganism's genome.
43. (Previously presented) The method of claim 1 wherein the non-standard amino acid degrading protein is a leucine dehydrogenase, a valine dehydrogenase, a glutamate/leucine/phenylalanine/valine dehydrogenase, or a phenylalanine dehydrogenase.

44. (Withdrawn) The method of claim 43 wherein the non-standard amino acid degrading protein is a leucine dehydrogenase from *Bacillus cereus*, a leucine dehydrogenase from *Bacillus subtilis*, a leucine dehydrogenase from *Nostoc sp.*, a leucine dehydrogenase from *Shewanella oneidensis*, a valine dehydrogenase from *Streptomyces avermitilis*, or a glutamate/leucine/phenylalanine/valine dehydrogenase from *Nitrosomonas europaea*.
45. (Withdrawn) The method of claim 44 wherein the non-standard amino acid degrading protein comprises SEQ ID NO:6, 8, 10, 12, 14, or 16.
46. (Withdrawn) The method of claim 45 wherein the non-standard amino acid degrading protein is encoded by a DNA molecule comprising SEQ ID NO:5, 7, 9, 11, 13, or 15.
- 47-48. (Cancelled)
49. (Previously presented) The method of claim 1, wherein said non-standard amino acid degrading protein is a microbial non-standard amino acid degrading protein.